

IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A transmitter comprising:

a first circuit coupled to an input port of the transmitter, the first circuit including an input port and an output port and an inverter including no more than two transistors including a first transistor and a second transistor, the first transistor having a source/drain directly connected to a source drain of the second transistor and a first gate of the first transistor and a second gate of the second transistor both coupled directly to the input port of the transmitter,

wherein the first transistor and the second transistor of the inverter include a n-type metal-oxide semiconductor field-effect transistor connected in series with an p-type metal-oxide semiconductor field-effect transistor and wherein the n-type metal-oxide semiconductor field-effect transistor is between about two and about three times larger than the p-type metal-oxide semiconductor field-effect transistor; and

a second circuit including a second circuit input port coupled to the output port of the first circuit, the second circuit including a second circuit output port coupled to an output port of the transmitter, wherein the first circuit is sized with respect to the second circuit such that for a pulse signal applied to the input port of the transmitter, the transmitter generates an output signal having a rise-time and a fall-time that are substantially equal at the output port of the transmitter,

wherein the transmitter is operable to transmit at a signal level, and the first circuit and the second circuit are coupled to a supply potential having a value of about twice the signal level.

2-5. (Canceled)

6. (Original) The transmitter of claim 1, wherein the second circuit includes a plurality of driver circuits.

7. (Original) The transmitter of claim 6, wherein each of the plurality of driver circuits includes a p-type metal-oxide semiconductor field-effect transistor connected in series with an n-type metal-oxide semiconductor field-effect transistor.

8. (Original) The transmitter of claim 7, wherein the p-type metal-oxide semiconductor field-effect transistor is sized to source a first current and the n-type metal-oxide semiconductor field effect transistor is sized to sink a second current substantially equal to the first current.

9. (Original) The transmitter of claim 7, wherein the second circuit is connected to an equalization control circuit.

10. (Original) The transmitter of claim 9, wherein the equalization control circuit provides de-emphasis.

11. (Previously Presented) A transmitter comprising:

a first circuit coupled to an input port of the transmitter, the first circuit including an input port and an output port and no more than two transistors including a first transistor and a second transistor, the first transistor having a source/drain directly connected to a source drain of the second transistor, the second transistor larger than the first transistor; and

a second circuit including a second circuit input port coupled to the output port of the first circuit, the second circuit including a second circuit output port coupled to an output port of the transmitter, wherein the first circuit is sized with respect to the second circuit such that for a pulse signal applied to the input port of the transmitter, the transmitter generates an output signal having a rise-time and a fall-time that are substantially equal at the output port of the transmitter,

wherein the transmitter transmits at a signal level and the first circuit and the second circuit are coupled to a supply potential having a value of about twice the signal level.

12. (Currently Amended) A method comprising:

receiving a signal at a first circuit, the first circuit including an input port and an output port and no more than two transistors including a first transistor and a second transistor, the first

transistor having a source/drain directly connected to a source drain of the second transistor, a first gate of the first transistor and a second gate of the second transistor both coupled directly to the input port of the transmitter, the second transistor larger than the first transistor;

in a second circuit coupled to the first circuit, the second circuit including a plurality of p-type metal-oxide semiconductor field-effect transistors, enabling the plurality of p-type metal-oxide semiconductor field-effect transistors to drive a transmission line; and

enabling less than the plurality of the p-type metal-oxide semiconductor field-effect transistors to drive the transmission line,

wherein the first circuit is sized with respect to the second circuit such that for a pulse signal applied to the input port of the first circuit, the transmitter generates an output signal having a rise-time and a fall-time that are substantially equal at an output port of the transmitter,

wherein the output signal has a signal level, and the first circuit and the second circuit are coupled to a supply potential having a value of about twice the signal level.

13. (Original) The method of claim 12, wherein receiving a signal at a first circuit includes receiving a digital signal.

14. (Original) The method of claim 13, wherein enabling the plurality of p-type metal-oxide semiconductor field-effect transistors to drive a transmission line includes enabling the plurality of p-type metal-oxide semiconductor field-effect transistors substantially simultaneously.

15. (Original) The method of claim 14, wherein enabling less than all of the p-type metal-oxide semiconductor field-effect transistors to drive the transmission line comprises enabling less than all of the p-type metal-oxide semiconductor field-effect transistors substantially simultaneously.

16. (Previously Presented) A system comprising:

a transmitter including:

a first circuit coupled to an input port of the transmitter, the first circuit including an input port and an output port and no more than two transistors including a first transistor and a second

transistor, the first transistor having a source/drain directly connected to a source drain of the second transistor, the second transistor larger than the first transistor; and

a second circuit to couple the first circuit to an output port of the transmitter, the second circuit coupled to an equalization control circuit, wherein the equalization control circuit provides de-emphasis;

a receiver; and

a transmission line to couple the output port of the transmitter to the receiver,

wherein the transmitter transmits at a signal level and the first circuit and the second circuit are coupled to a supply potential having a value of about twice the signal level.

17. (Original) The system of claim 16, wherein the first circuit including an inverter having a p-type metal-oxide semiconductor field-effect transistor and an n-type metal oxide semiconductor field-effect transistor, the n-type metal-oxide semiconductor field-effect transistor being between about two and about three times larger than the p-type metal oxide semiconductor field-effect transistor.

18. (Original) The system of claim 17, wherein the second circuit includes a voltage driver.

19. (Original) The system of claim 18, wherein the second circuit includes a controllable source impedance.

20. (Currently Amended) A system comprising:

a first processor including a transmitter comprising:

a first circuit including a single and no more than one input port coupled to an input port of the transmitter and a single and no more than one output port,

wherein the first circuit includes an inverter including no more than two transistors including a n-type metal-oxide semiconductor field-effect transistor connected in series with an p-type metal-oxide semiconductor field-effect transistor, a first gate of the a n-type metal-oxide semiconductor field-effect transistor and a second gate of the p-type metal-oxide semiconductor field-effect transistor both coupled directly to the input port of the transmitter, and wherein the n-

type metal-oxide semiconductor field-effect transistor is between about two and about three times larger than the p-type metal-oxide semiconductor field-effect transistor; and

a second circuit including a single and no more than one second circuit input port directly coupled only to the single and no more than one output port of the first circuit, the second circuit including a second circuit output port coupled to an output port of the transmitter, wherein the first circuit is sized with respect to the second circuit such that for a pulse signal applied to the input port, the transmitter generates an output signal having a rise-time and a fall-time that are substantially equal at the output port; and

a second processor including a receiver coupled to the transmitter through a transmission line,

wherein the transmitter is operable to transmit at a signal level, and the first circuit and the second circuit are coupled to a supply potential having a value of about twice the signal level.

21. (Original) The system of claim 20, wherein the first processor includes a very long instruction word processor.

22. (Original) The system of claim 21, wherein the second processor includes a complex instruction set processor.

23. (Original) The system of claim 22, further comprising an equalization control circuit coupled to the second circuit to provide de-emphasis equalization.

24. (Previously Presented) The transmitter of claim 11, wherein the first circuit includes an inverter.

25. (Previously Presented) The transmitter of claim 24, wherein the inverter includes a n-type metal-oxide semiconductor field-effect transistor connected in series with an p-type metal-oxide semiconductor field-effect transistor.

26. (Previously Presented) The transmitter of claim 25, wherein the n-type metal-oxide semiconductor field-effect transistor is larger than the p-type metal-oxide semiconductor field-effect transistor.